



Date: Tuesday, 11/29/2005 7:10:51 PM
User: Linda Lacelle



Process Sheet



Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BEARING ASSEMBLY
Job Number	: 25057	Part Number	: D3121241
Estimate Number	: 10716	Drawing Number	: D3121 REV C2
P.O. Number	: N/A	Project Number	: N/A
This Issue	: 11/29/2005 S.O. No. : N/A	Drawing Revision	: C2
Prsht Rev.	: NC	Material	: N/A
First Issue	: N/A Type : MACHINED PARTS	Due Date	: 12/10/2005
Previous Run	: N/A	Qty:	30 Um: Each
Written By	: See below		
Checked & Approved By	: <u>RAA 04/02/18 KS/05</u>		
Comment	: Created By Auto Work Order		



Additional Product

Job Number:	
-------------	---

Seq. #:	Machine Or Operation:	Description :
1.0	MDELINR12500	DELIN ROUND BAR 1.25"
		
<p>Comment: Qty.: 0.0431 f(s)/Unit Total: 0.5166 f(s) Material: Ø1.25 Delrin Rod (M-DELIN-R1.2500)Identify as D3121-25 Batch: <u>M16128</u></p>		
<u>ml 05/12/10</u> 30		

Tools:		
2.0	HARDINGE	HARDINGE CNC LATHE SMALL
		
<p>Comment: HARDINGE CNC LATHE SMALL</p> <p>1-Turn D3121-25 Cap as per Folio FA387</p> <p>2-Deburr</p>		
<u>ml 05/12/10</u> 30		

Tools:		
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
		
<p>Comment: INSPECT PARTS AS THEY COME OFF MACHINE</p>		
<u>ml 05/12/10</u> 30		

Tools:		
4.0	QC8	SECOND CHECK
		
<p>Comment: SECOND CHECK</p>		
<u>ml 05/12/10</u> 30		

Tools:		
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: PS Date: 05/12/13
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEARING ASSEMBLY

Job Number: 25057

Part Number: D3121241

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0

D312123

Bearing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 12.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3121-23

Bearing B24858

ml 05/12/10 30

Tools:

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Press D3121-23 Bearing into D3121-25 Cap as per Dwg D3121

ml 05/12/10 30

Tools:

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Ep 05/12/10 30

Tools:

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 401

Cd 05/12/12 30

Tools:

9.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Sgt 05/12/13 30

05/12/13 30

Tools:

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector







Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

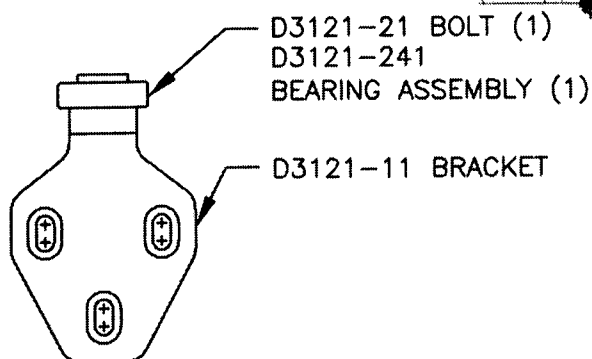
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN		DRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED		APPROVED		DRAWING NO. D3121	REV. C SHEET 1 OF 10
DATE 04.02.17			TITLE BRACKET ASSEMBLY		SCALE 1:2
A	02.04.15		NEW ISSUE		
B	03.01.16		ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146		
C	04.02.17		ADD CLEARANCE; USE -241 BEARING		
C1		04.03.26	3.17 WAS 4.00; 6.11 WAS 6.14		
C2		04.04.26	0.230 WAS 0.238		

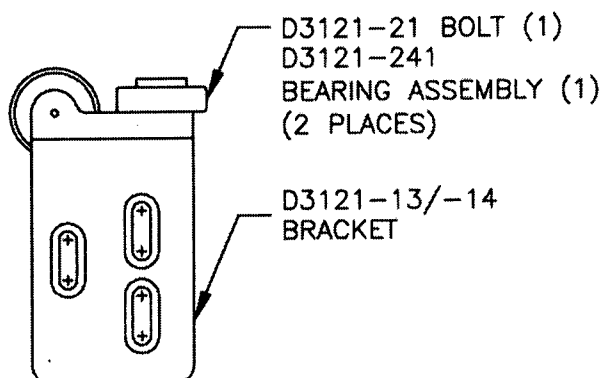
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04.03.01 *[Signature]*



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-11 BRACKET

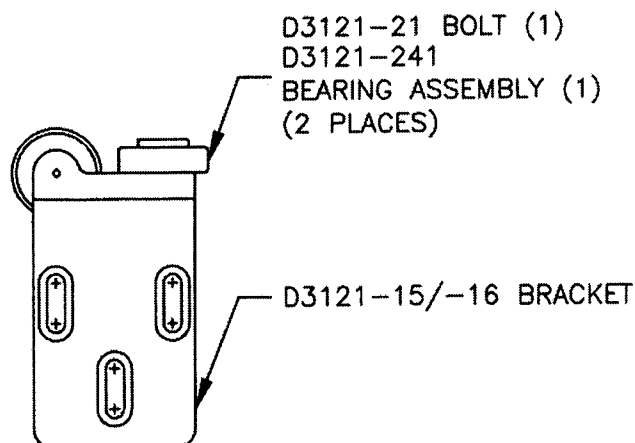
D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-13/-14
BRACKET

**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-15/-16 BRACKET

**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

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CHECKED #	APPROVED #	DRAWING NO. D3121	REV. C SHEET 2 OF 10
DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:2

D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-111 BRACKET

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-113/-114 BRACKET

D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)

D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-115/-116
BRACKET

D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)

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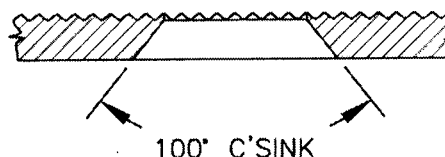
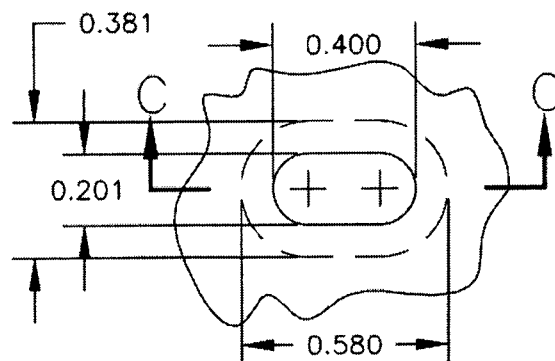
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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

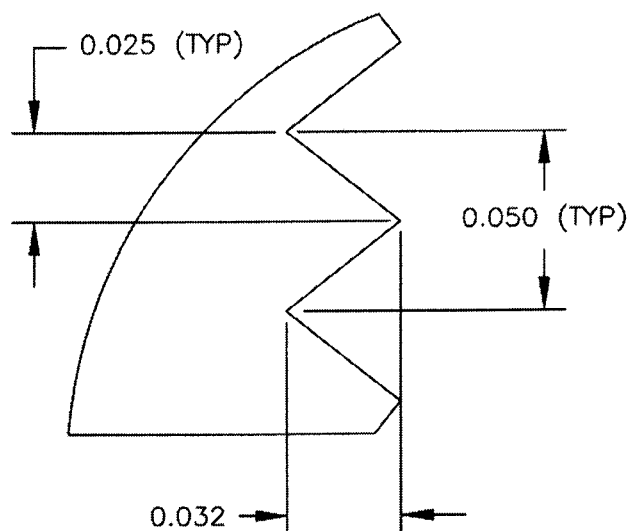
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DETAIL A:
SLOT DETAIL
SCALE 2:1
VIEW ROTATED



SECTION
C-C

DETAIL B:
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20

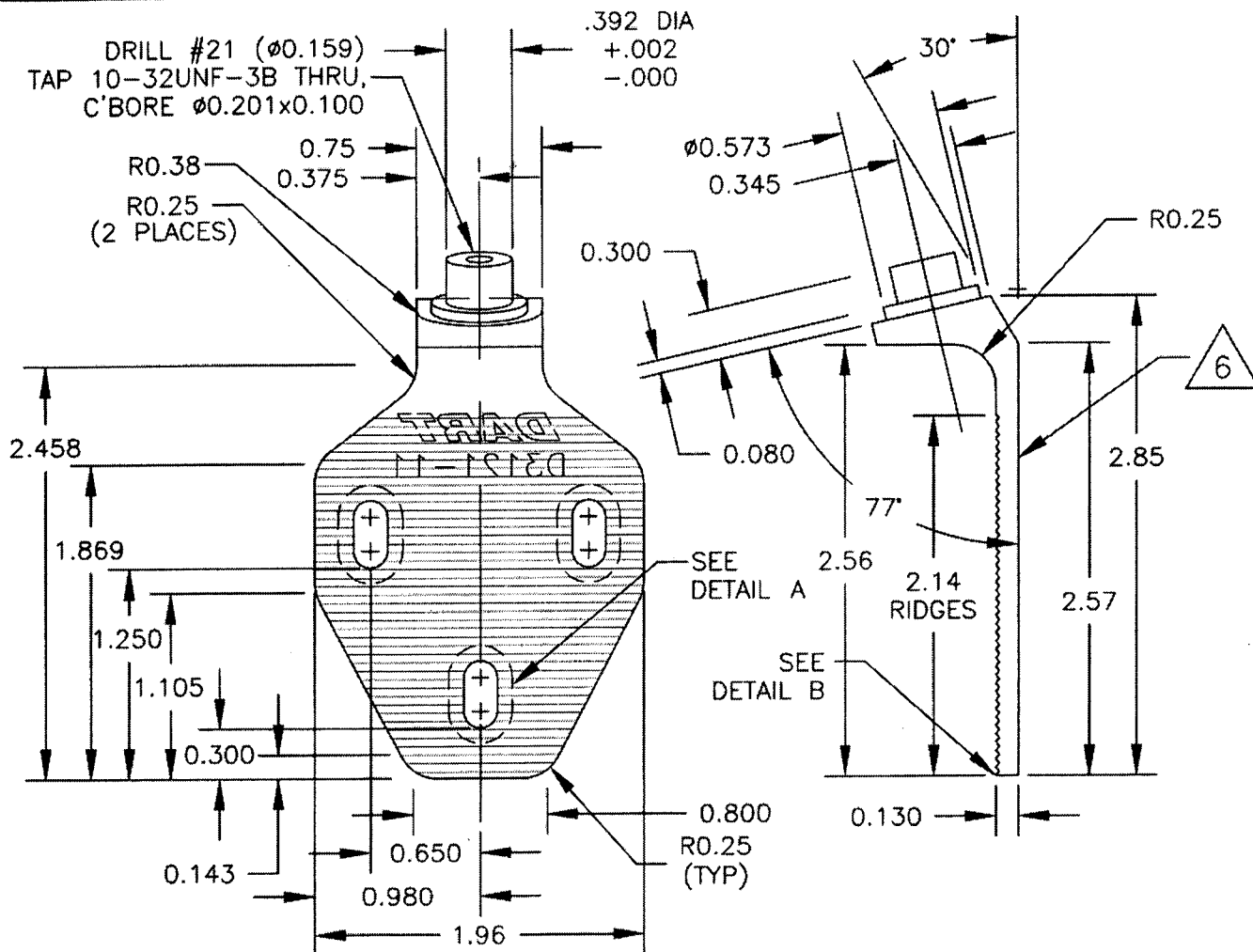


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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

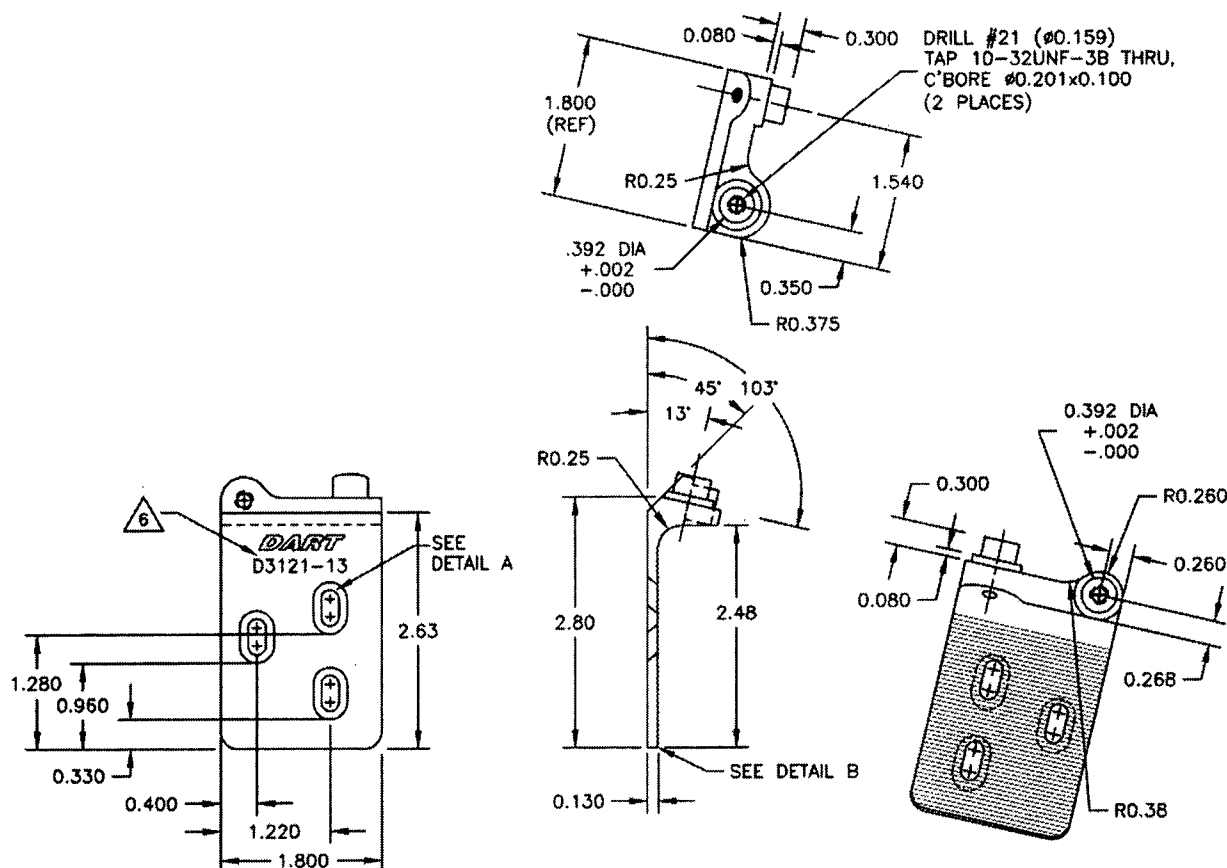
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-13 BRACKET (SHOWN)
D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

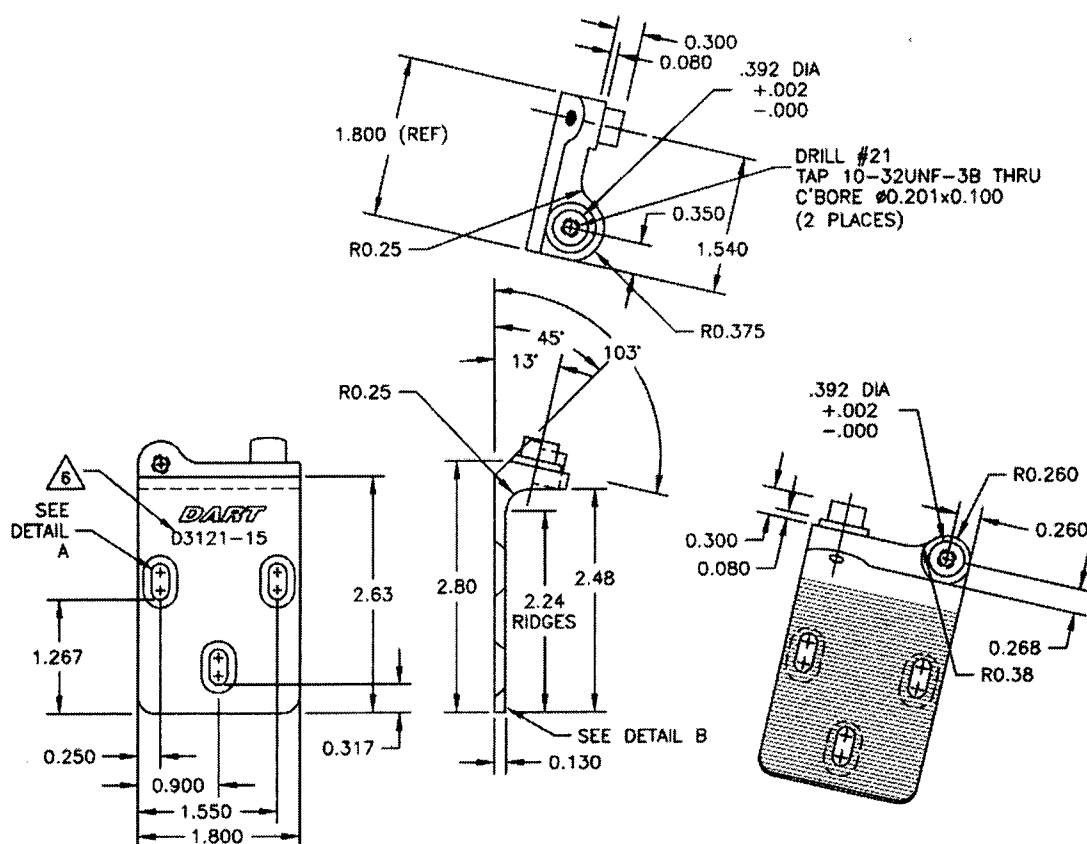
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-15 BRACKET (SHOWN)

D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

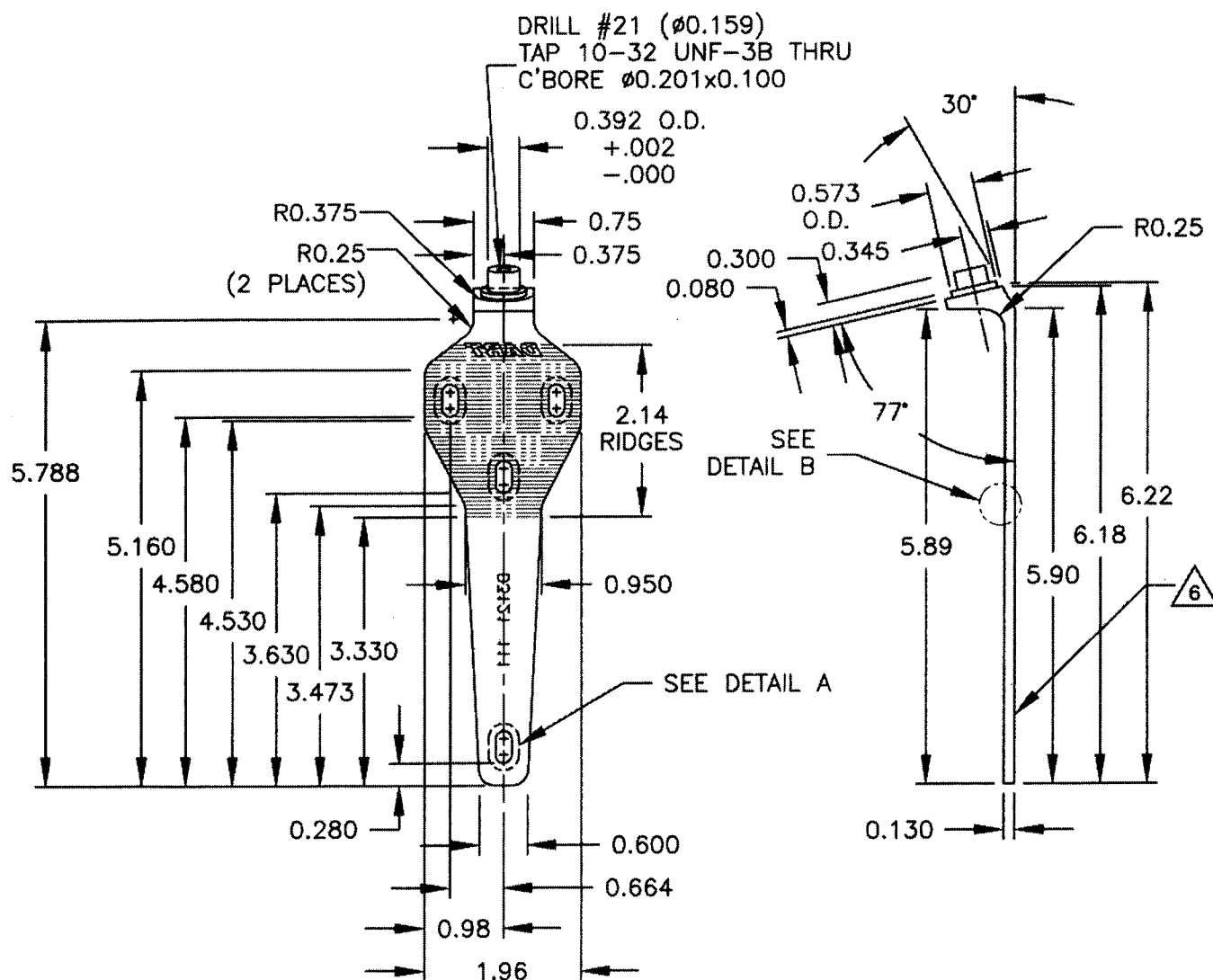
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2



D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

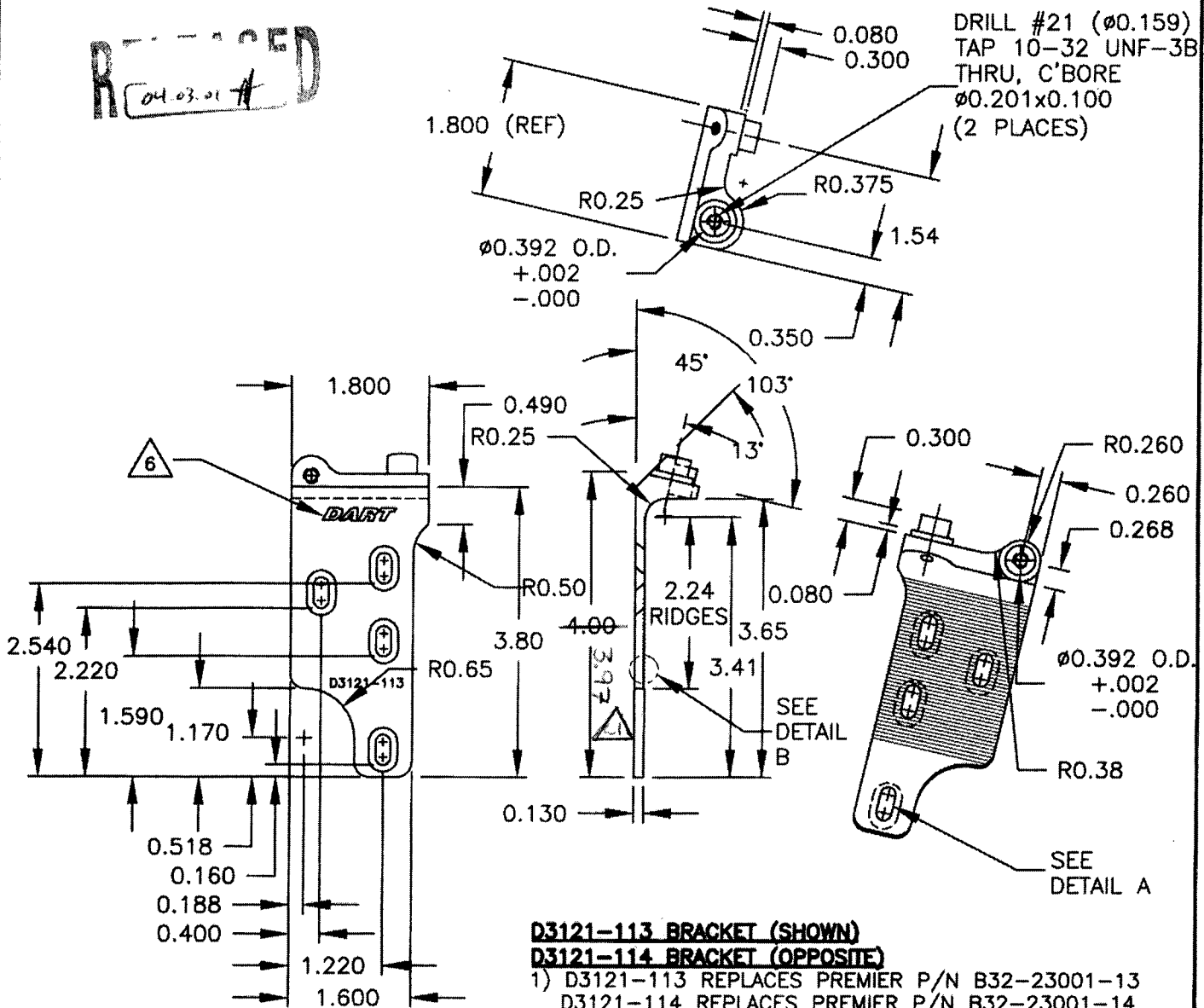
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DATE 04.02.18		TITLE BRACKET ASSEMBLY	SCALE 1:2

REPLACED
04.03.01 #**D3121-113 BRACKET (SHOWN)****D3121-114 BRACKET (OPPOSITE)**

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

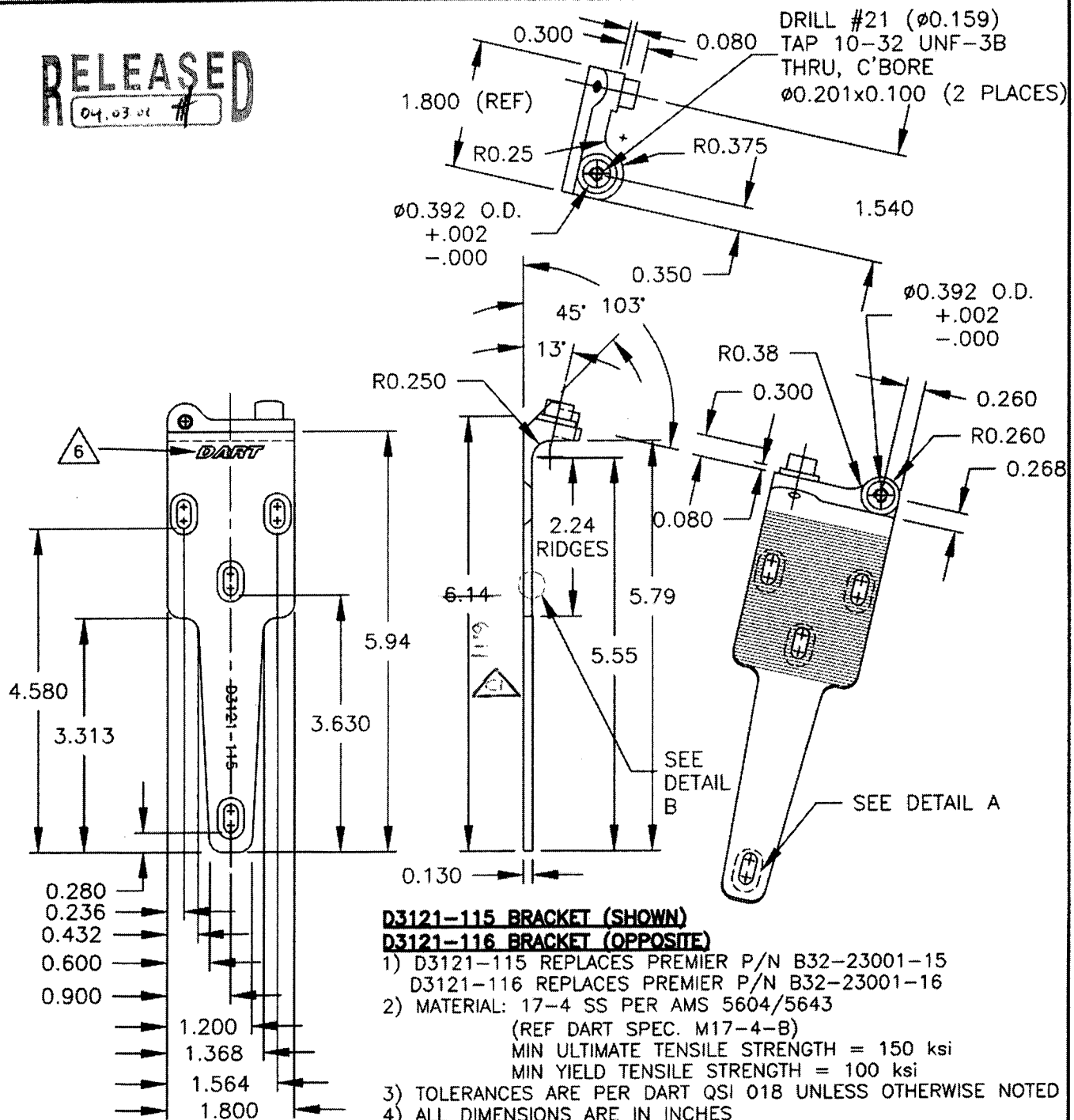
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DATE 04.02.18	TITLE BRACKET ASSEMBLY		SCALE 1:2

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04.03.01 #



D3121-115 BRACKET (SHOWN)

D3121-116 BRACKET (OPPOSITE)

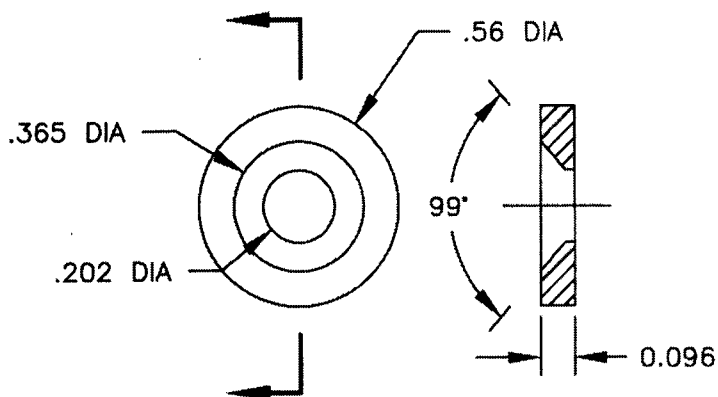
- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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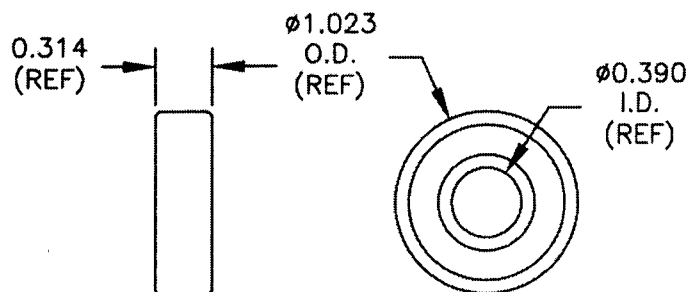


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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



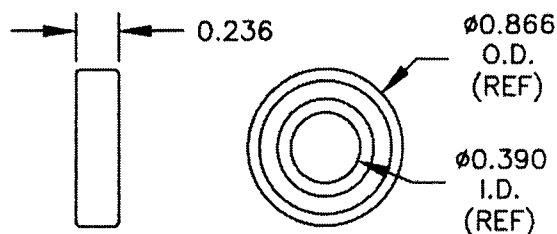
D3121-17 WASHER (SCALE 2:1)

- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



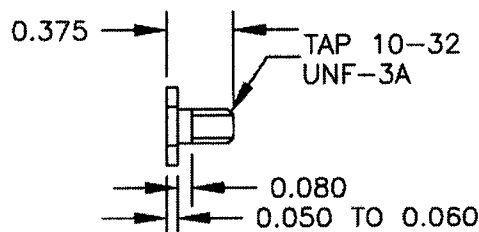
D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES



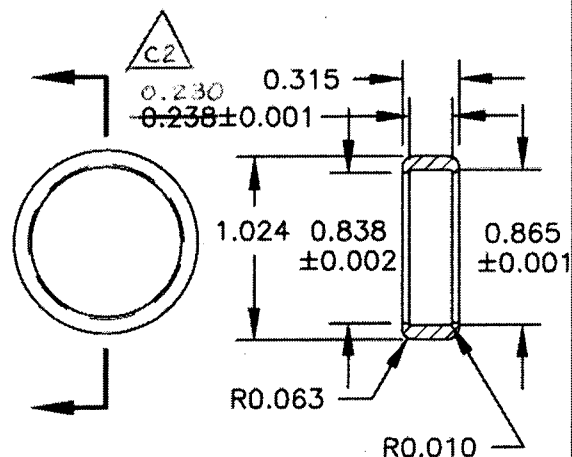
D3121-23 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ
- 2) ALL DIMENSIONS ARE IN INCHES



D3121-21 BOLT (SCALE 1:1)

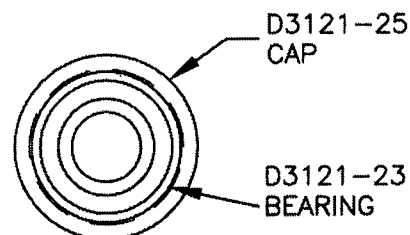
- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, 1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

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D3121-24 BEARING ASSEMBLY (SCALE 1:1)

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